

*NASUTITERMES ACANGUSSU*, A NEW SPECIES OF  
TERMITE FROM BRAZIL  
(ISOPTERA, TERMITIDAE, NASUTITERMITINAE)

Adelmar Gomes Bandeira<sup>1</sup>  
Luiz Roberto Fontes<sup>2</sup>

ABSTRACT

*N. acangussu*, sp. n., described from Amazonian region, is compared with *N. major*, *N. maximus*, *N. nigriceps*, *N. macrocephalus* and *N. crassus*. Some ecological data are also presented.

*Nasutitermes* has the highest number of species and the greatest abundance of individuals among Amazonian termites (Bandeira, *in press*). Recent collections from that region, by the senior author, continuously showed problems of taxonomic nature and revealed a number of interesting ecological features.

The species described herein was frequently found in secondary forests ("capoeiras"), pastures, and in an abandoned banana plantation at the Parque Nacional da Amazônia (Tapajós). The specimens were mostly encountered in the nests, and eventually under cow or horse dungs. The organic, rounded nest, visible on erect decaying trunks, either exposed or occult by the vegetation, commonly has a diameter of about 30-50 centimeters, and sometimes contains sparse grains of sand in the walls. In July 1977, the senior author observed workers of *N. acangussu*, flanked by soldiers, successfully invading a nest (diameter of 30-40 cm) of *N. myersi*?, situated on a shrub; after 20 days, however, the nest was occupied by ants of the genus *Crematogaster*, showing no signs either of the invaders or of the attacked termites.

We are grateful to the late Dr. R. L. Araujo, to whom we are indebted for most valuable advice in our termite studies, and for advising us about the possibility of this being a new species. We thank also S. A. Marques and M. Dantas, for collecting some samples.

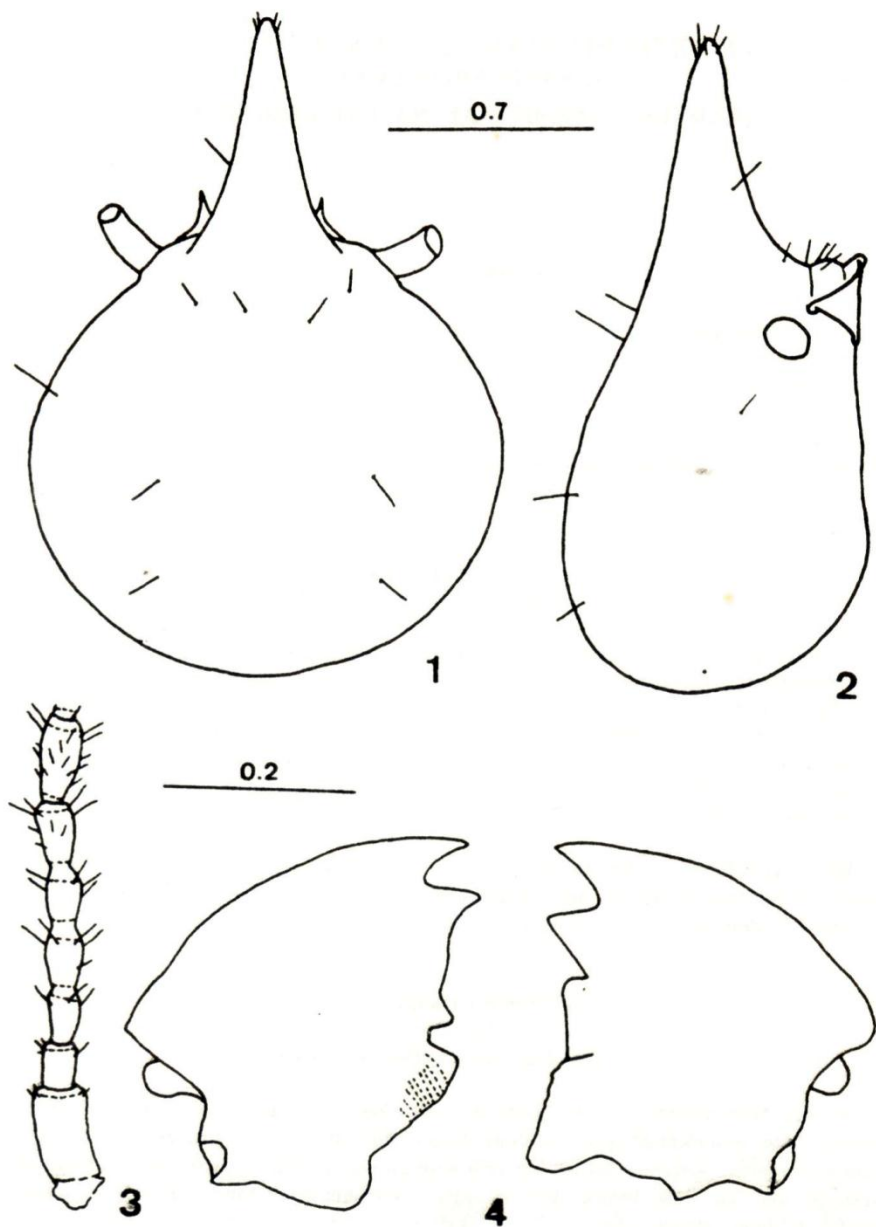
*Nasutitermes acangussu*, sp. n.

(Figs. 1 - 4)

(From Tupi: *acanga*, head; *assu*, large)

Soldier. Monomorphic. Head capsule and nasus brown to light brown; nasus sometimes paler at base, or darker at apex; mentum, clypeus and areas around antennal sockets paler, yellowish-brown. Antenna brown to yellowish-brown. Dorsal sclerites yellowish-brown. Sternites and legs dark yellow. Bristles usually medium sized (about as long as scape). Bristles of head capsule (figs. 1-2): a single (sometime absent) bristle at the middle of each side, a pair at the middle of the disc, a pair at the posterior region, and a row of 4-7 at

1. Museu Paraense Emilio Goeldi, Caixa Postal 399, 66000 Belém, Pará.
2. Museu de Zoologia, Universidade de São Paulo, Caixa Postal 7172, 01000 São Paulo, São Paulo. Bolsista, Fundação de Amparo à Pesquisa do Estado de São Paulo (Proc. Biol. 78/1149).



*Nasutitermes acangussu*. Soldier: 1, head, dorsal; 2, head, lateral; 3, antenna. Major worker: 4, mandibles. Drawings of soldier based on sample number 171 (MPEG); of worker based on sample number 540 MPEG). At the same scale: 1-2; 3-4. Scales in millimeters.

the base of the nasus; occasionally 1 or 2 additional bristles at sides. Nasus with 0-1 bristles at each side, near base, and about 4 short bristles and some very minute hairs at tip. Submentum with 2, and some shorter ones, subapical bristles. Pilosity of antenna denser towards apex. Pronotum with a row of bristles at anterior margin, and sometimes 2 shorter bristles at posterior margin. Meso- and metanotum, and each abdominal tergite, with a row of medium to long bristles at the posterior margin; bristles scarcer in the anterior sclerites. Sternites with a row of long bristles near posterior margin, a row of short bristles about the middle, and some short bristles irregularly disposed. Head (figs. 1-2) rounded, without the nasus about as long as wide; in profile, top almost straight; nasus short relatively to head capsule length, conical, apex slightly curved downward; mandibles with distinct points. Antenna (fig. 3) with 14 articles: II shorter than III; III-V about the same length, shorter than VI. Pronotal lobe slightly emarginated in the middle.

Major worker. Head brown to dark brown. Antenna towards apex shading from pale yellow or white to brownish-yellow. Thoracic nota pale yellow to white. Abdominal sclerites transparent. Legs white. Head with short, scattered bristles. Pronotum with some bristles (longer than those on head) at anterior margin, and some shorter, scattered ones, on the whole surface. Tergites with a row of bristles (longer than those on head) at posterior margin. Sternites with a row of bristles (longer than those on head) near posterior margin and several shorter, scattered bristles. Antenna with 15 articles: II, IV and V about the same length, shorter than III.

Minor worker. Head pale brownish-yellow. Antenna white to yellow-white. Thoracic sclerites and legs white. Abdominal sclerites transparent. Pilosity as described for the major worker. Antenna white 15 articles: III-V subequal in length, shorter than II or VI.

Measurements (in millimeters) of 12 soldiers, from several localities; means in parentheses. Length of head to tip of nasus, 1.90-2.25 (2.05); length of nasus, 0.56-0.72 (0.65); width of head, 1.31-1.68 (1.50); height of head excluding postmentum, 0.94-1.13 (1.02); length of antenna, 2.19-2.50 (2.38); length of pronotum, 0.28-0.34 (0.31); width of pronotum, 0.62-0.75 (0.72); length of hind tibia, 1.56-1.94 (1.78).

Indices based on 12 soldiers from several localities; means in parentheses. Length of head to tip of nasus/width of head, 1.27-1.45 (1.37); length of head capsule/width of head, 0.85-1.00 (0.93); length of nasus/length of head capsule, 0.44-0.51 (0.46).

Taxonomic discussion. *N. acangussu* is distinct from the other species of the genus by its dimensions, pilosity, and shape of head; it will be compared with some related species that (except for *N. crassus*) occur in the same region. *N. major*: head more oval in dorsal view, and with more bristles; nasus longer (relatively to head length) and more slender, with a hump at base, in profile. *N. maximus*: head less rounded in dorsal view, and with more bristles; nasus with a hump at base, in profile. *N. nigriceps*: head longer (relatively to its width) and more oval in dorsal view, darker and with dense pilosity; nasus more slender; body sclerites covered with dense pilosity. *N. macrocephalus*: head less rounded in dorsal view, and with dense pilosity; nasus longer (relatively to head length); body sclerites covered with dense pilosity. *N. crassus* (according to the original description): nasus longer (relatively to head length), and with a hump at base, in profile.

Material. In the collections of Museu Paraense Emilio Goeldi (MPEG) and Museu de Zoologia, Universidade de São Paulo (MZSP). BRAZIL. Amazonas: Município de Silves (Fazenda Aruanã, km 232 da Rodovia Manaus-Itacoatiara, 03°04' S, 58°45' W), type colony n° 331 (MPEG), n° 7807 (MZSP), soldiers (holotype, paratypes), workers, 11.IV.1978; n°s 088, 127, 142, 171, 189, 191, 192, 198, 333, 337 (MPEG), n°s 7799, 7800, 7801, 7802, 7803, 7804, 7805, 7806, 7808, 7809 (MZSP), soldiers, workers, 11.IV.1978;

nº 229 (MPEG), nº 7432 (MZSP), soldiers, workers, nymphs, 29.IX.1977; nºs 242, 256 (MPEG), nºs 7436, 7440 (MZSP), soldiers, workers, 4.IX.-14.X.1977. Manaus (03°08' S, 60°01' W), nºs 007, 063 (MPEG), nºs 7496, 7498 (MZSP), soldiers, workers, 18.VIII-15.X.1976. *Pará*: Município de Itatuba (Parque Nacional da Amazônia, Tapajós, 04°35' S, 56°20' W), nº 540 (MPEG), nº 7797 (MZSP, soldiers, workers, 13.I.1979. All samples collected by Ademar G. Bandeira, Suely A. Marques and Mario Dantas.

#### REFERENCE

- Bandeira, A. G., (in press). Ecologia de cupins (Insecta, Isoptera) da Amazônia Central: efeitos do desmatamento sobre as populações. *Acta Amazonica*.